



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,890	11/29/1999	DAVID N. MAKINSON	SCH-52	8294

22827 7590 10/31/2002

DORITY & MANNING, P.A.
POST OFFICE BOX 1449
GREENVILLE, SC 29602-1449

EXAMINER

NGUYEN, VINH P

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 10/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/450,890	MAKINSON ET AL.
	Examiner	Art Unit
	VINH P NGUYEN	2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 August 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-79 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-79 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) Other: _____

1. Claims 9,16-24,34-37,42-52,66 and 69-79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, it is unclear what “a higher level analysis” is. What has been compared in order to be qualified as “higher level analysis”.

In claims 16,42 and 69, it is unclear what “selected customized features” represent. Is the consumed energy qualified as “selected customized features”? Is it the same as “higher level analysis”. If it is, What has been compared in order to be qualified as “higher level analysis”.

In claim 34, it is unclear what “predetermined additional metrology features” represent. Are they the same as “higher level analysis”. If it is, What has been compared in order to be qualified as “higher level analysis”.

In claim 66, it is unclear what “additional metrology features” represent. Are they the same as “higher level analysis”. If it is, What has been compared in order to be qualified as “higher level analysis”. this “higher level analysis”.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

2. Claims 1-79 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is unclear from the specification what "higher level function circuit board". What are necessary requirements for a circuit board to become "a higher level function circuit board".

Therefore the operation of the apparatus of the instant application is not well understood.

Furthermore, it appears that the specification does not have supports for the terms "a higher level analysis" as recited in claim 9, "selected customized features" as recited in claims 16,42 and 69, "additional metrology features" as recited in claim 66.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16-17 (insofar as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Selph et al (Pat 4,804,957).

As to claims 16-17, Selph et al disclose a utility meter as shown in figure 3 having an enclosure with a cover (66) and a base plate (72), a metrology board (68) electrically connected to the spades (not shown), a circuit board (70) electrically connected to the metrology board (68) for providing selected customized features for the electric meter beyond the metrology board

(68). As to claim 17, it appears that the circuit board and the metrology board is electrically connected to each other through a fixed connector so that the circuit board (70) is able to collect data from the metrology board in order to analyze the energy consumption.

It is noted that since the term "selected customized features" is not well defined. This term is not given any patentable weight. Furthermore, the circuit board (70) is read as "a circuit board providing selected customized features for said electricity meter beyond said metrology board electricity consumption signal.

5. Claim 65 is rejected under 35 U.S.C. 102(b) as being anticipated by Loy et al (Pat # 5,966,010).

As to claim 65, Loy et al disclose a meter as shown in figure 1 having a metrology board (20), an encloseable casing (12) having a cover (26) and a baseplate (12) and an antenna (22) connected to the metrology board (20).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 18-22,25,27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selph et al (pat # 4,804,957) in view of Miller (Pat # 4,368,424) and Johnson (Pat #4,298,839).

Selph et al disclose a utility meter as mentioned in paragraph # 3. As to claim 18,

it would have been obvious for one of ordinary skill in the art to provide a snap fit mount for the circuit board since this is an alternative way to mount a circuit board within the enclosure. As to claim 19, it appears that both of the circuit boards inherently receive supply power from a common power supply so that these board would be able to function. As to claims 20,25 and 27, it appears that the device of Miller has resilient connectors for connecting the spades with the metrology board. It would have been obvious for one of ordinary skill in the art to provide the resilient connector as taught by Miller to the device of Selph since this is an alternative way to connect the metrology board to the spades. As to claims 21 and 29-30, the device of Selph has a hall effect sensor (84) mounted on a metrology board (68). As to claims 22, it appears that the meter of Selph would include a chassis since this is a conventional feature on the energy meter. As to claim 28, Johnson disclose a meter as shown in figures 1 and 2 having a light source (86,87), a light pipe (115,117) for transmitting the light from the light source to the outside, an encloseable casing (12) having a cover and a baseplate. It would have been obvious for one of ordinary skill in the art to provide light source and light pipe on the chassis to the device of Selph et al (pat # 4,804,957) in view of Miller so that optical readout is obtained. As to claim 31, it would have been old and well known to have a chassis and meter display in the device of Selph.

8. Claims 34-36,38-41,65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selph et al (pat # 4,804,957) in view of Loy et al (Pat # 5,966,010) and Johnson (Pat #4,298,839) and Shincovich et al (Pat # 5,590,179).

As to claims 34,38-39,65-67, Selph et al disclose a utility meter as shown in figure 3 having an enclosure with a cover (66) and a base plate (72), a metrology board (68) electrically connected to the spades (not shown), a circuit board (70) electrically connected to the metrology board (68) for providing selected customized features for the electric meter beyond the metrology board (68). It is noted that the limitation of “predetermined additional metrology features” recited in claim 34 is not given any patentable weight. Furthermore, it is noted that the board of Selph et al does not have an antenna. Loy et al disclose a meter as shown in figure 1 having a metrology board (20), an encloseable casing (12) having a cover (26) and a baseplate (12) and an antenna (22) connected to the metrology board (20). It would have been obvious for one of ordinary skill in the art to provide an antenna to the metrology board so that the measured signal is transmitted to a remote location. As to claim 35, it is well known that there is a power supply for providing power to those boards. As to claims 36 and 41, it would have been well known to connect the metrology board to the circuit board through a fixed connector. As to claims 37 and 40, Johnson disclose a meter as shown in figures 1 and 2 having a light source

(86,87), a light pipe (115,117) for transmitting the light from the light source to the outside, an encloseable casing (12) having a cover and a baseplate. It would have been obvious for one of ordinary skill in the art to provide light source and light pipe on the chassis to the device of Selph et al (pat # 4,804,957) in view of Loy et al so that optical readout is obtained.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.


VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2829

